

**IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT**

No. 19-60245

United States Court of Appeals
Fifth Circuit

FILED

July 15, 2020

Lyle W. Cayce
Clerk

HOUSTON AQUARIUM, INCORPORATED, and its Successors,

Petitioner

v.

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION;
EUGENE SCALIA, SECRETARY, U.S. DEPARTMENT OF LABOR,

Respondents

Petition for review of an Order of the
Occupational Safety and Health Review Commission

Before BARKSDALE, HIGGINSON, and DUNCAN, Circuit Judges.

STEPHEN A. HIGGINSON, Circuit Judge:

The Houston Aquarium seeks review of the Occupational Safety and Health Review Commission's (OSHRC's) decision affirming the application of the Occupational Health and Safety Administration's (OSHA's) commercial diving safety regulations to the dives its staff members perform to feed animals housed at the Aquarium and to clean the facility's tanks. A majority of the OSHRC panel affirmed the Administrative Law Judge's (ALJ's) determination that feeding and cleaning dives did not fall within the "scientific diving" exemption to the commercial standard because they were not performed "by employees whose sole purpose for diving is to perform scientific research tasks"

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as required by the regulatory definition. 29 C.F.R. § 1910.402. Under a plain reading of the entire definition, as well as the regulation guidelines and regulatory history, these dives do qualify as scientific diving. Accordingly, we REVERSE.

I.

The Houston Aquarium operates a four-story complex in downtown Houston with at least eight fresh and saltwater tanks large enough to perform dives. The Aquarium employs many divers, all of whom are trained scientists with diving certifications, to perform work in the tanks such as feeding the animals, cleaning the tank windows, siphoning gravel from the bottom of the tanks, removing animals that have died, and conducting “event dives” during which aquarium divers are observed by patrons and visitors.

In December 2011, OSHA received a complaint from an Aquarium employee alleging that some of the dives taking place at the Aquarium were not scientific, meaning that the Aquarium was violating the Commercial Diving Operations (CDO) standard by failing to comply with its requirements for non-exempt dives. OSHA assigned Mark Chapman, a Compliance Safety and Health Officer (CSHO), to investigate the complaint. Chapman recommended that no citation be issued because the Aquarium’s activities were subject to the scientific diving exemption, and the Aquarium was therefore not required to comply with the CDO standard. The employee then elevated his complaint to OSHA’s national office, and Chapman was directed to re-open the investigation. In February 2012, Chapman returned to the Aquarium and ultimately issued a Citation and Notification of Penalty on July 10, 2012. Before this citation, the Aquarium conducted operations based on an understanding that it was exempt from compliance with the CDO standard, an assumption that was reinforced by OSHA rarely, if ever, conducting

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inspections of this or any other Aquarium to check compliance with the CDO standard.

The ALJ conducted a three-day hearing and ultimately concluded in a written order following the hearing that some of the Aquarium's diving activities did not fall within the scientific exemption. Specifically, the ALJ found that the Aquarium's divers engage in three types of dives: (1) feeding and cleaning dives; (2) event dives, during which divers perform for visitors; and (3) mortality dives, during which dead animals are removed and taken to the Aquarium's lab for examination. The ALJ held that the mortality dives fell within the scientific exemption but feeding/cleaning and event dives did not. Finally, the ALJ also made various evidentiary rulings on issues raised by the parties in post-hearing briefs.

The Aquarium did not appeal the ALJ's ruling that its "event dives" were not covered by the scientific exemption. OSHA did not appeal the ALJ's ruling as to mortality dives. Thus, the only issue before the Commission was whether the feeding and cleaning dives fell within the scientific exemption.¹ The majority of the Commission panel, in a decision issued on February 15, 2019, affirmed the ALJ's determination that these dives were not scientific because the activities performed "fail[ed] to meet the plain terms of the definition of 'scientific diving.'" The Chairman of the Commission dissented.

The Aquarium timely petitioned this court for review on April 16, 2019.

II.

This court has jurisdiction over this appeal under 29 U.S.C. § 660(a), which provides for judicial review of OSHRC orders. On appeal, findings of fact

¹ The Commission did not directly address the ALJ's evidentiary rulings, but it implicitly adopted these findings when it "affirm[ed] the judge's decision in full."

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by the Commission are “conclusive” if they are “supported by substantial evidence on the record considered as a whole.” 29 U.S.C. § 660(a); *Sanderson Farms, Inc. v. Perez*, 811 F.3d 730, 734 (5th Cir. 2016). “Substantial evidence is ‘such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.’” *Chao v. OSHRC*, 401 F.3d 355, 362 (5th Cir. 2005) (quoting *Consolo v. Fed. Mar. Comm’n*, 383 U.S. 607, 619–20 (1966)). Thus, the court must “uphold factual findings if a reasonable person could have found what the Commission found, even if the appellate court might have reached a different conclusion.” *Sanderson Farms*, 811 F.3d at 734 (alteration, internal quotation marks, and citations omitted). The court reviews legal conclusions to determine whether they are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A); *Sanderson Farms*, 811 F.3d at 735 (citations omitted); *Trinity Marine Nashville, Inc. v. OSHRC*, 275 F.3d 423, 427 (5th Cir. 2001) (citations omitted).

III.

The Aquarium makes three arguments: (1) that the ALJ erred in crediting the OSHA compliance officer’s lay testimony opining that the Aquarium violated the commercial diving regulations; (2) that the ALJ erred in excluding Aquarium expert testimony; and (3) that the Commission erred in holding that feeding and cleaning dives are not scientific dives and are therefore subject to the CDO standard.

A. Evidentiary Issues

We address the first two issues raised by the Aquarium together and affirm the ALJ’s evidentiary findings.

First, the ALJ did not err in crediting the compliance officer’s testimony about the CDO standard as lay opinion testimony because his testimony was based on his firsthand perceptions during his investigation. *See United States*

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v. Yanez Sosa, 513 F.3d 194, 200 (5th Cir. 2008) (holding that “lay testimony ‘results from a process of reasoning familiar in everyday life,’ while expert testimony ‘results from a process of reasoning which can be mastered only by specialists in the field.’” (quoting FED. R. EVID. 701, Advisory Committee Notes to 2000 Amendments)). Lay witnesses may give opinions that require specialized knowledge when the witness draws “straightforward conclusions from observations informed by his own experience.” *United States v. El-Mezain*, 664 F.3d 467, 512 (5th Cir. 2011) (quoting *United States v. Riddle*, 103 F.3d 423, 429 (5th Cir. 1997)). The officer’s testimony related to conditions he observed while at the Aquarium, which is proper lay testimony.

Further, even if the compliance officer testified to some matters that fell outside the realm of lay opinion testimony, the admission of this testimony was harmless because the officer did not offer an opinion on whether the scientific exemption applies to Aquarium feeding and cleaning dives. He merely testified that the Aquarium was not in compliance with the CDO standard. But the Aquarium’s argument is that it was not *required* to meet the CDO standard because it is exempt. The Aquarium does not contend that it was actually in compliance with the CDO standard. The officer’s opinions therefore were not sufficiently important or injurious to the ALJ’s finding. *See United States v. Wright*, 634 F.3d 770, 775 (5th Cir. 2011) (“A nonconstitutional trial error is harmless unless it had substantial and injurious effect or influence in determining the jury’s verdict.” (quoting *United States v. Lowery*, 135 F.3d 957, 959 (5th Cir. 1998))).

Second, the Aquarium’s witnesses were properly treated as lay witnesses because although the Aquarium identified these witnesses as “potential” experts in its interrogatory answers, its prehearing statement merely referred to them as “witnesses,” and it never tendered them as experts at the hearing. Similarly, in its prehearing statement, the Aquarium listed its witnesses in a

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chart under the heading “Respondent’s Witnesses” that described their “area of expertise” and contained a short statement of the purpose of their testimony. The chart notes that Derek Smith, an expert witness for the Aquarium, “has been retained by Defendants to testify regarding the applicable safety requirements.” The chart contains no similar statement for the other witnesses, implying that they were being offered as lay witnesses.

It was the Aquarium’s burden to lay the foundation for the ALJ to evaluate the witnesses’ qualifications. *See* 29 WRIGHT & MILLER, FEDERAL PRACTICE & PROCEDURE § 6264.3 (2d ed. 2019) (“[T]he party proffering a witness as an expert has the burden of laying a foundation that establishes the witness is qualified.”). While there is no specific process by which a court must assess an expert’s qualifications, *see Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999), some evaluation is needed before a witness can testify as an expert. *Hopkins v. Dow Corning Corp.*, 33 F.3d 1116, 1124 (9th Cir. 1994) (“The district court is not required to hold a Rule 104(a) hearing, but rather must merely make a determination as to the proposed expert’s qualifications.”).

Here, the ALJ stated in her decision and order that she did not have notice of the Aquarium’s intention to tender these witnesses as experts. Therefore, she was unable to perform the necessary evaluation of their qualifications and the reliability of their testimony, because the Aquarium never explicitly designated them as experts either before or at the hearing. Given that the Aquarium was not clear about its desire to have these witnesses testify as experts, the ALJ did not abuse her discretion in treating them as lay witnesses. *United States v. Cooks*, 589 F.3d 173, 179 (5th Cir. 2009) (giving the standard of review for rulings on expert testimony).

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B. The Applicability of the CDO Standard to Aquarium Feeding and Cleaning Dives

The Aquarium challenges the Commission's holding that feeding and cleaning dives are not within the scientific exemption to the CDO standard. It argues that these dives meet the regulatory definition of scientific diving: they are a necessary part of scientific, research, and educational activities carried out by employees performing solely scientific research tasks. We agree and hold that the Commission's holding, based on its narrow interpretation of the term "research," was too restrictive in that it failed to account for the language of the exemption read as a whole.

The Occupational Safety and Health Act of 1970, 29 U.S.C. § 651 *et seq.*, is meant "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions." *Id.* § 651(b). The Act imposes a general duty on employers to furnish employees a workplace "free from recognized hazards that are causing or are likely to cause death or serious physical harm." *Id.* § 654(a)(1). It delegates authority to promulgate specific safety standards to the Secretary of Labor. *Id.* § 655. To establish that an employer has violated a particular safety standard, the Secretary has the burden to prove (1) "that the cited standard applies"; (2) that the employer has not complied with the cited standard; (3) that employees have "access or exposure to the violative conditions"; and (4) "that the employer had actual or constructive knowledge of the conditions," *i.e.*, that it actually knew of the conditions or, with the exercise of reasonable diligence, should have known. *Sanderson Farms*, 811 F.3d at 735.

The CDO standard contains OSHA's safety requirements for diving employers. It "applies to diving and related support operations conducted in connection with all types of work and employments, including general industry, construction, ship repairing, shipbuilding, shipbreaking and

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longshoring.” 29 C.F.R. § 1910.401(a)(2). But the regulations do not apply to “any diving operation . . . [d]efined as scientific diving and which is under the direction and control of a diving program” that includes a diving safety manual with minimum safety procedures and a controlling diving safety board.² *Id.* § 1910.401(a)(2)(iv)(A), (B). Scientific diving is

diving performed solely as a necessary part of a scientific, research, or educational activity by employees whose sole purpose for diving is to perform scientific research tasks. Scientific diving does not include performing any tasks usually associated with commercial diving such as: Placing or removing heavy objects underwater; inspection of pipelines and similar objects; construction; demolition; cutting or welding; or the use of explosives.

Id. § 1910.402. As the party seeking to invoke an exemption from a legal requirement, the Aquarium has the burden of proving that the exemption applies. *StarTran, Inc. v. OSHRC*, 290 F. App’x 656, 665 (5th Cir. 2008).

We are not aware of any case law that speaks to whether the dive tasks performed at an aquarium qualify as scientific diving. Therefore, we must interpret the regulatory language as an issue of first impression. During the administrative proceedings, the Commission majority found that feeding and cleaning dives did not fall within the scientific diving exemption because the activities are not performed by divers “whose sole purpose for diving is to perform scientific research tasks.” *See* 29 C.F.R. § 1910.402. It held that feeding was not a research task because the divers did not collect written data about the feeds. It also found that cleaning could not be for the sole purpose of scientific research because three employees testified that part of the purpose of cleaning the tanks was so that visitors could see the animals more clearly.

² Prior to their initial hearing before the ALJ, the parties stipulated that the Aquarium has a safety manual and a diving control board, in compliance with regulatory requirements.

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As the Chairman’s dissenting opinion points out, rather than focusing on the single term “research,” the Commission should have interpreted the language of the exemption as a whole. We look to the “fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.” *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133 (2000) (quoting *Davis v. Mich. Dep’t of Treasury*, 489 U.S. 803, 809 (1989)); *see also Doe v. KPMG, LLP*, 398 F.3d 686, 688 (5th Cir. 2005) (citation omitted) (“When interpreting a statute, we start with the plain text, and read all parts of the statute together to produce a harmonious whole.”).

Applying these principles to the definition of the term “scientific diving,” the activities performed during the feeding and cleaning dives fall within the plain text of the exemption. During feeding and cleaning dives, divers perform tasks such as scrubbing the exhibit windows free of algae, siphoning the gravel at the bottom of exhibits, and feeding the animals. Divers testified that one focus of cleaning dives is removing aiptasia, a genus of sea anemone that reproduces quickly and can “overrun” the exhibits if not handled correctly. They also testified that if an animal needs to be captured or observed more closely, this would be done during a feeding or cleaning dive. The Aquarium’s expert witness Smith testified that during all Aquarium dives, including feeding and cleaning dives, the divers “are required to make observations of animal health, animal behaviors, the type of food they’re eating, the type of algae that grows on the windows, [and] the condition of the exhibitory,” all of which Smith classified as the collection of data. The methods for reporting this data are: (1) a Facility Dive Log documenting that a diver has completed the dive and noting its length; and (2) communication of any abnormalities, such as discoloration on a fish indicating injury, scratches in the tank, or an animal

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exhibiting unusual behavior, to a supervisor or biologist in charge of the exhibit.

These activities are “performed solely as a necessary part of a scientific, research, or educational activity by employees whose sole purpose for diving is to perform scientific research tasks” because their purpose is to preserve the aquatic life in the complex artificial ecosystem that is the Aquarium, and the divers are trained scientists who are employed to carry out that mission. 29 C.F.R. § 1910.402. As the Chairman pointed out, in an exhibit, “[e]verything involved—from the water’s chemical content, temperature and filtration, to the microorganisms, algae, and the marine animals themselves—exists in a delicate balance that must be constantly monitored and maintained by trained biologists.” Feeding and cleaning must be done in accordance with specific scientific requirements to maintain the health of the animals. The project of maintaining this aquatic life in a controlled, rather than a wild, environment in order to display it for the public is a scientific research task. If the divers did not feed the animals or remove waste and invasive algae from the tanks, the animals would die, resulting in the failure of the Aquarium’s mission.

The common meaning of the term “research” does not require writing or publication beyond the Facility Dive Log and informal reports of abnormalities about which the divers testified. *See* Merriam-Webster Dictionary (online ed.) available at <http://www.merriam-webster.com> (last visited July 6, 2020) (defining “research” as, inter alia, “studious inquiry or examination” and “the collecting of information about a particular subject”); Cambridge Dictionary (online ed.) available at <http://www.dictionary.cambridge.org> (last visited July 6, 2020) (defining “research” as “a detailed study of a subject, especially in order to discover (new) information or reach a (new) understanding”). The divers are engaged in a “studious . . . examination” and “detailed study” when they observe the animals for abnormalities, and when they work to keep the

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animals in the Aquarium alive, healthy, and breeding. That an organization collaborates among employees and engages in verbal communication does not mean that the examination and study of the animals in the tanks is not “studious” or “detailed.” Nothing about the feeding and cleaning dives renders the information that the trained scientists performing the dives gather during these dives outside of the definition of “research.”

In addition, the definition of scientific diving as a whole reinforces that Aquarium feeding and cleaning dives are appropriately characterized as scientific. The second part of the regulatory definition provides that scientific dives “do[] not include performing any tasks usually associated with commercial diving such as: Placing or removing heavy objects underwater; inspection of pipelines and similar objects; construction; demolition; cutting or welding; or the use of explosives.” 29 C.F.R. § 1910.402. Feeding and cleaning animal tanks at an aquarium are activities clearly distinguishable from any of the listed activities, which are typically associated with construction and industrial work. Similarly, OSHA’s guidance to be applied in “arguably ambiguous cases,” specifically distinguishes between “[t]he tasks of a scientific diver,” which are “those of an observer and data gatherer,” and the “[c]onstruction and trouble-shooting tasks traditionally associated with commercial diving.” 49 Fed. Reg. 29105-02, 29106, 29108 (July 18, 1984). Of these two categories, the trained scientists diving at the Aquarium are in the first.

The regulatory history further confirms the Aquarium’s reading of the exemption. The supplementary information to the rule codifying the CDO standard focuses on the hazards faced by divers performing “such operations as . . . the manipulation of heavy objects” and when doing tasks like “burning, welding, and using explosives.” 42 Fed. Reg. 37650, 37651 (July 22, 1977). In

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1982, when OSHA created the scientific diving exemption, it defined the two types of diving as follows:

Commercial diving activities necessitate the use of heavy tools and include such tasks as placing or removing heavy objects underwater, inspection of pipelines and similar objects, construction, demolition, cutting or welding, or the use of the explosives.

In contrast, the sole purpose of scientific diving is to perform scientific research which includes such tasks as scientific observation of natural phenomena or responses of natural systems, and gathering data for scientific analysis. The tasks performed by scientific divers are usually light, short in duration, and if any handtools are used, they are usually no more than simple non-powered handtools such as screwdrivers and pliers.

47 Fed. Reg. 53357-01, 53359 (November 26, 1982). These descriptions draw a stark contrast between commercial diving, whose hazards require additional safety measures, and scientific diving, which can be conducted safely with an adequate safety manual and diving safety board.

The regulatory history as a whole highlights that OSHA's purpose in creating the CDO standard was to improve workplace safety for divers working on dangerous tasks such as construction and drilling, which are not present at the Aquarium. OSHA discerned that institutions like the Aquarium, which can achieve a low rate of, or no accidents by self-regulation, did not require regulation under the CDO standard. Rather than involving demolition, heavy tools, or construction, the Aquarium feeding and cleaning dives involve observation of natural phenomena and light, short tasks that require small, simple instruments such as brushes, scrub pads, and other cleaning tools. The Aquarium's work fits within the exemption as OSHA described it when it created the scientific diving exemption.

Indeed, the alleged violations with which the Aquarium has been charged were not shown in the record to have safety benefits. OSHA charged

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the Aquarium with, inter alia, not having a two-way communication system, not having a reserve air supply, and not having a safety harness. The Aquarium's Senior Dive Officer, Todd Hall, testified that Aquarium divers do not need a two-way communication system, because unlike divers who may be in open or murky water or separated by long distances, Aquarium divers can easily see the spotter standing outside of the tank and can communicate using hand signals. Divers also do not need reserve air supplies in the Aquarium's tanks that are a mere 12 or 14 feet deep. If a diver loses his air supply, he can propel himself to the surface in equal or less time than switching to a second air supply. Lastly, divers do not need safety harnesses, which are used for emergency extractions, because the Aquarium uses quick-deploy harnesses when needed. Because of the short distance, divers can be pulled out using these harnesses in less than two minutes. In this regard, we note that the Aquarium has had no diving injuries or safety incidents since it opened.

Indeed, there is evidence that adding the additional safety equipment required under the CDO standard could make the divers and animals *less safe* in the Aquarium environment. Derek Smith testified that "bringing something like [extra safety equipment] into the exhibit presents the opportunity for the animals to either have different behaviors, or even possibly if they get a hold of that thing ingest it." He also noted that, "anything brought into the exhibit presents a hazard to the fish populations."

The Aquarium has shown that feeding and cleaning dives are a necessary component of its scientific research because they are a source of regular contact with the animals during which divers can assess their needs and identify potential hazards or abnormalities, and because feeding and cleaning are necessary to the animals' survival. The Aquarium's purpose is to engage in animal husbandry and to learn about and display the animals it houses by studying them in the close proximity that a highly controlled

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environment allows. Feeding the animals and cleaning their tanks is an essential part of this complex mission.

IV.

For the foregoing reasons, the decision of the OSHRC is REVERSED.